

RURAL FINANCIAL MARKETS IN ASIA: FLAGSHIPS AND  
FAILURES

by

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**Abstract**

This paper summarizes key findings of our study of the rural financial markets in Asia. Policy makers in the region have actively intervened in these markets in the past three decades, first to support the Green Revolution and, more recently, to reduce poverty. Massive amounts of subsidized funds have been channeled to targeted clients, but many policies were also implemented that discriminated against agriculture. There has been a recent shift to more rural-friendly policies and a market approach to financial market development. The authors argue that the result of these negative policies and interventions is a fragile financial system in many Asia countries characterized by limited outreach and sustainability.

## **Rural Financial Markets in Asia: Flagships and Failures<sup>1</sup>**

### **I. Introduction**

Rural financial markets in Asia are ill-prepared to meet the challenges of the twenty-first century. That is the primary conclusion of our study conducted for the Asian Development Bank (Meyer and Nagarajan).<sup>2</sup> Policymakers have actively intervened in Asia's rural financial markets during the past three decades in attempts to meet economic and social objectives, first to support the Green Revolution and, more recently, to reduce poverty. Massive amounts of subsidized funds have been supplied for these purposes. Specialized agricultural development banks and cooperatives have been created to lend to targeted clients when commercial lenders failed to serve them adequately. But many of these efforts were implemented in countries that at the time pursued price, trade and foreign exchange policies that discriminated against agriculture and rural areas. Now many market economies have introduced more rural-friendly policies, and both entrepreneurs and financial institutions are learning how to cope with the new environment. Many of the transition economies have dismantled the planned allocation of resources and struggle to create market-oriented financial institutions.

The results of these many changes and interventions have left most Asian countries with fragile rural financial systems characterized by limited outreach and sustainability. Many financial institutions have failed, others have been recapitalized, and many are weakened with large non-performing portfolios. Few countries have strong institutions capable of serving large

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<sup>2</sup> We gratefully acknowledge the support provided by the ADB and the assistance of a large number of people that helped us complete the study. The views expressed in it and in this paper are our own and may not be shared by the ADB or any of the persons who assisted us. Unless specifically noted, the detailed references and sources of data used in this paper are provided in our ADB study.

numbers of rural farm and nonfarm clients. An especially serious problem is that the poorest members of the rural economy tend to have the most limited access to formal financial services. Informal finance continues to be important, especially for the poor, in spite of efforts to expand formal finance.

A positive feature in the region, however, is that after great effort and a large amount of experimentation three flagship organizations have emerged with tremendous outreach and a high degree of financial sustainability. They demonstrate what can be accomplished with adequate institutional designs. These organizations, plus the positive experiences of several nongovernmental organizations (NGOs), suggest that some of the financial innovations implemented in recent years are more promising than earlier attempts to induce lenders to serve small farmers. Many countries have adopted the new paradigm of financial market development. However, many still pursue the old paradigm of directed agricultural credit and generally their performance has been inferior in both outreach and sustainability.

The purpose of this paper is to highlight the key findings of our research on rural financial markets in the region. Except where noted, the source of information is our ADB study, which drew on a voluminous literature and some primary data. Asia is vast so to narrow the study to manageable proportions, six countries were selected for detailed study. They are Bangladesh, India, the Kyrgyz Republic, the Peoples Republic of China (PRC), Indonesia, and Thailand. Bangladesh was chosen because microfinance organizations (MFOs) play a crucial role in the country. India and the PRC were selected because they represent huge countries with heavy government intervention in their financial markets. The Kyrgyz Republic is one of the transition economies that has rapidly implemented major economic reforms. In Indonesia and Thailand, market forces have been allowed to play a larger role in shaping the financial system.

The paper is divided into six sections. Section II describes the approach used by most Asian countries to develop rural financial markets. Section III summarizes the findings of the six

case studies. Section IV describes the relatively good performance of the three flagship institutions and Section V summarizes key factors that explain their success. Section VI presents the conclusions and implications.

## **II. The Asian Approach to Developing Rural Financial Markets**

The Asian approach to developing rural financial markets has been summarized in a number of historical studies. The second rural Asian study of the ADB in 1976/77 (ADB, 1978) reviewed major developments of the previous decade. The authors concluded that five trends were encouraging:

1. A major expansion was occurring in rural banking outlets.
2. Sharp increases were being made in agricultural loan disbursements.
3. An expanded number of institutions were making loans without collateral and some were making long-term loans.
4. Special food production programs had been introduced which provided subsidized credit and inputs to farmers.
5. Governments were encouraging or mandating financial institutions to increase agricultural lending by imposing credit quotas, creating credit guarantees, and requiring rural bank branches to be opened in exchange for the authorization to open urban branches.

In addition, the authors noted several problems:

1. Loan recovery, which plagued many earlier cooperative credit schemes, was a serious problem (leading to the collapse of major credit programs in Indonesia and the Philippines).
2. Interest rates charged to farmers were usually low and did not reflect the cost of lending.  
This often encouraged large farmers to preempt the scarce supplies.
3. Medium- and long-term loans were limited, and the volume of agricultural credit actually fell in many countries relative to funds allocated to manufacturing.

Both the 1967/68 and the 1976/77 ADB rural Asia studies were ambivalent in their conclusions about agricultural credit. They noted the difficulty of determining if credit constraints restricted the demand for fertilizer and new seed varieties. The authors believed that new technology increased demand for operating and investment credit, but warned that small farmer credit programs were generally unworkable in terms of serving the target group. They argued that neither interest nor input subsidies, nor systems to control input use were likely to stimulate the credit use or channel it in the right direction. The rapid expansion of credit institutions either exceeded demand or the capacity of institutions to efficiently administer the credit. Many institutional issues were still unresolved in spite of the massive efforts undertaken after World War II to build rural institutions and institutionalize the supply of agricultural credit.

Notwithstanding the ambivalent findings of these studies, Asian policymakers continued to aggressively pursue directed agricultural lending during much of the 1970s and 1980s, and even up to the present time in some countries. The approach has the following nine general characteristics:

1. Lending interest rates are subsidized and small farmer loans are set at especially low rates.
2. Governments and donors are the main sources of funds and local savings mobilization is largely ignored.
3. The objective of government policy is to increase the supply of loans made to farmers with little attention paid to institutional sustainability.
4. Production packages are created with credit treated as an input like seeds and fertilizer.
5. Credit is often targeted for “productive purposes,” while loans for consumption and rural nonfarm enterprises are ignored and, in some cases, prohibited.
6. Many credit programs specifically target small farmers and employ supervised credit through cooperatives to attempt to ensure it is used properly.

7. Cooperatives are often the primary credit channels, while commercial banks and agricultural development banks are more important in some countries.
8. Transaction costs for lenders and borrowers in supplying and accessing financial services are largely ignored.
9. Some recent programs have broadened their target groups from small farmers to the rural poor.

### **III. Lessons from the Case Studies**

The six case studies provided comprehensive data used to develop our conclusions, and reveal how the general policies described above were specifically applied to rural finance in each country. Each study was based on a comprehensive review of literature and the analysis of primary data collected with the assistance of local consultants. A brief summary of each is presented here.

#### **A. Thailand**

Thailand has expanded rural finance largely through commercial banks and the government-owned Bank for Agriculture and Agricultural Cooperatives (BAAC). The private commercial banks were initially encouraged to lend to agriculture through quotas that could be met by direct lending or by depositing funds in BAAC. Historically, the banks have tended to serve larger farmers and agribusinesses. BAAC has expanded rapidly by making wholesale loans to farmer associations and cooperatives that on-lend to farmers, and by making retail loans to farmers in groups and as individuals. Its retail loans go mostly to small and medium sized farms, and it is reported to now reach some 80 percent of the country's farmers. This degree of outreach is the most significant of any single institution in Asia. BAAC recently sought and received authorization to expand lending to nonfarm enterprises in rural areas so this will help diversify its portfolio. It began to aggressively mobilize savings only recently and has slowly increased the share of savings in its total resources. The BAAC interest rate structure is controlled and loan

rates are still somewhat subsidized; this negatively affects its sustainability. It administers government programs to assist agriculture but ensures that it is fully compensated for the costs.

The growth in total agricultural credit has been impressive; the ratio of agricultural credit to agricultural GDP grew from about 0.06 in 1970 to nearly 0.70 by 1996. As a result, there has been relatively little interest in creating special credit programs for the poor, but informal sources are still important sources of savings and loan services in rural areas. The agricultural credit system is now largely self-financed, although BAAC receives funds from the government and donors.

## **B. Indonesia**

The Indonesian agricultural credit system was dominated by the integrated BIMAS project implemented through Bank Rakyat Indonesia (BRI) from the late 1960s until its collapse in the early 1980s. The major reforms then implemented by the unit desa system converted it into one of the most profitable rural financial institutions in Asia. Millions of clients borrow nontargeted loans and it mobilizes savings so successfully that surplus rural savings flow to urban areas to finance corporate lending. BRI-UD serves both farm and nonfarm enterprises. It is surprising that in spite of the BRI-UD success, other smaller provincial and local financial institutions serving rural areas have only partially copied its market-oriented policies. As a result, they have been less successful. Moreover, many highly subsidized poverty-oriented projects have been recently created, in response to the economic problems caused by the 1997-98 financial crisis. This is an unwise departure from the drive to create sustainable rural finance and undermines non-subsidized financial institutions following a market-oriented approach.

## **C. India**

India has massively expanded public and private bank branches and cooperatives in rural areas and created specialized Regional Rural Banks to expand outreach to the rural poor, small farmers, landless workers, and small entrepreneurs. The government still owns 80 percent of the



banking industry, and the cooperatives are significantly controlled by the individual states. The National Bank for Agriculture and Rural Development (NABARD) is the apex institution responsible for agricultural credit policy and refinancing rural lending. The Integrated Rural Development Program (IDRP) was created in 1978 to provide subsidized loans and cash subsidies to the poor. The loan melas of the 1980s and the loan waiver of 1991 were political abuses of the banking sector that damaged credit discipline, and loan recovery is a serious problem. Interest rates on loans have been tightly controlled. They were finally largely deregulated in 1996, but many financial institutions have been reluctant to use this flexibility. Because of low interest rates and poor loan recovery, many institutions are not sustainable. MFOs, heavily dependent on government and donor funds, are beginning to emerge and several function as NABARD's partners to promote and link self-help groups in rural areas with commercial banks. The rural financial system has expanded outreach; however, it provides poor quality service and is sustained by subsidies. In spite of (or perhaps because of) heavy government intervention and massive resources for directed agricultural credit, the ratio of agricultural credit to agricultural GDP increased only marginally from 0.159 in 1982 to 0.195 in 1989, and started to decline thereafter. The country has attempted to implement more market-oriented policies in recent years, but progress is slow because the historical tradition of directed credit is slow to change.

#### **D. Bangladesh**

Bangladesh historically attempted to expand rural finance through its banking system. The nationalized commercial banks (NCBs) were required to open rural branches in exchange for opening more lucrative urban branches. Two agricultural development banks were specifically charged with rural lending. The Bangladesh Bank (central bank) sets quotas for agricultural lending and rediscounts rural loans made to targeted borrowers. Unfortunately, today the formal financial system is severely impaired. The NCBs, the agricultural development banks, and even

many new private commercial banks face huge loan recovery problems, as do the agricultural cooperatives. In spite of this poor environment, a surprisingly robust microfinance movement has emerged, which includes the specialized Grameen Bank and hundreds of NGOs that lend to the poor, many in rural areas. These microlenders have achieved significant breadth (number of clients) and depth (poverty level of clients) of outreach, although most are highly dependent on subsidies. Fortunately, most have avoided the bad-debt syndrome that plagues the banks. Bank and cooperative lending have declined in relative terms, but the combination of bank, cooperative, and microfinance lending amounted to about nine percent of agricultural GDP in 1993/94, which was slightly higher than the same ratio a decade earlier. There is great uncertainty about the future of rural finance. The MFOs are freer than banks to adopt a market-oriented approach but also fail to fully cover their costs and risks of lending. They remain dependent on uncertain government and donor funds for their survival. Regulation of MFOs is becoming a serious issue because some have begun to aggressively mobilize voluntary deposits. Some have also begun to offer more flexible loan terms and conditions than was typical in the early stages of MFO development. The growing competition among the MFOs has resulting in some borrower overindebtedness affecting portfolio quality of several institutions.

#### **E. Peoples Republic of China (PRC)**

The PRC has gone through three phases of financial reforms since 1979 in an attempt to create an efficient rural banking system. Information is incomplete about access to formal finance in rural areas. The rural sector is now served by a state bank, a policy bank, rural credit cooperatives (RCCs) and rural credit foundations (RCFs). The financial system has successfully mobilized a large amount of savings from rural households. The RCCs are most important in mobilizing rural household savings, and they channel a significant share of them into loans made to township and village enterprises (TVEs). The unregulated RCFs emerged in the 1990s in response to the unmet demand by households and collectives for financial services. They are

more important in lending to households than to TVEs and collectives. The system is somewhat more market-oriented today because lending quotas and interest rate ceilings have been relaxed for commercial banks. However, loan recovery is a serious problem so, with high costs and loan defaults, there are serious doubts about the sustainability of most rural financial institutions. A few specialized microfinance programs have recently been created to serve poor areas, but both public and private programs have performed poorly and operate with highly subsidized interest rates.

#### **F. The Kyrgyz Republic**

The Kyrgyz Republic has been more aggressive in implementing market reforms than many other central Asian transition economies, but the financial system is highly unstable. The banks, including the Promstro Bank and the ABK-Kyrgyzstan that service rural areas, have serious problems with nonperforming loans. Interest rates have been set below the rate of inflation and farm loans are subsidized through local government budgets. The Kyrgyz Agricultural Finance Corporation and savings and settlement companies have been newly created to mobilize savings and provide payment services. There is little information about them or the several donor-assisted microfinance schemes that have recently been started in rural areas. The entire rural financial system is weak and most institutions lack capacity to make good loans and recover them.

Our case studies, along with other literature about the region, revealed that a surprisingly large number of Asian countries have made relatively little progress in the past two decades. Subsidizing borrowers continues to be the primary objective and sustainability of financial institutions is secondary. Yet there is little conclusive evidence that the subsidies reach the intended persons, or that subsidized loans actually have a positive impact on technological change and agricultural output. Although there are important exceptions, the primary problems today are strikingly similar to those observed at the time of the ADB study in the 1970s:

1. Interest rates are often too low to cover the costs and risks of agricultural lending. Some MFOs have set their rates high enough to cover most costs, but a combination of regulations and political pressures have kept many agricultural lenders from raising rates to adequate levels.
2. Many countries have resisted adopting a market-oriented approach to rural finance. Targeted programs, subsidized refinance funds, and restrictions on clientele that can be served still exist even though some of the more repressive features of directed credit have been eliminated.
3. Nonperforming loans are a serious problem. Many rural financial institutions, especially several agricultural development banks, are weak and continue to exist only because of subsidies.
4. Savings mobilization is still relatively neglected in spite of the early successes observed by rural cooperatives in Japan, Republic of Korea and Taiwan. Most MFOs are dependent on government and donor resources.
5. Policymakers focus largely on the problems of agriculture and overlook the broader demand for financial services by the rural nonfarm economy.
6. Most rural financial institutions are unprepared to make long-term loans and to utilize the explosion in new information and communication technologies used in modern banking.

#### **IV. The Positive Example of Three Flagship Institutions**

Fortunately, the entire Asian rural finance experience is not as bleak as the examples above demonstrate. The performance of three Asian institutions has been far better than most rural financial institutions in the developing world. They have been intensively studied so there is more

information available about them than other institutions that may also have good performance but less is known about them. These flagship institutions are BAAC in Thailand, the BRI unit desa system of Bank Rakyat in Indonesia (BRI-UD), and the Grameen Bank (GB) in Bangladesh. Comparative information about them is presented in Table I with emphasis on the two criteria widely accepted as the appropriate framework for evaluation: outreach and self-sustainability (Christen, et al., 1995; Yaron, Benjamin and Piprek, 1997). Outreach refers to the degree of market coverage for low-income groups previously without access to formal financial services. It includes both the horizontal dimension (breadth of outreach/number of clients served) and the vertical dimension (depth/level of poverty of clients). In addition, the types and variety of financial services offered are also considered.

Sustainability refers to the ability of a financial institution to supply financial services on a continuous cost-covering basis without external subsidies. Calculation of the Subsidy Dependence Index (SDI) has been effectively used to evaluate the degree of subsidization of a financial organization (Yaron, 1992). Sustainability is desirable for at least two reasons: first, temporary access to loans produces some benefits, but creating a long-term sustainable financial relationship is more valuable because it provides opportunities for future benefits. A sustainable institution will benefit more clients than one that begins with a flourish but later collapses. Second, a sustainable institution is free from budgetary dependency on government and donors so borrowers can expect long-term access to services if they repay promptly. This helps institutions grow and provides some protection from political intrusion.

Some analysts fear a possible trade-off between microfinance outreach and sustainability (e.g. Hulme and Mosley, 1996). Institutions striving for self-sustainability may try to reduce costs through making larger repeat loans to established clients rather than serving new poor clients with small loans. Realizing economies of scale through wider outreach may contribute to sustainability since per unit lending costs decline as loan volume rises, while reaching greater

depth of outreach may detract from sustainability if the costs and risks of lending are not covered by interest income. These three institutions achieve considerable outreach, but sustainability needs to be improved in two of them.

The three financial institutions have slightly different objectives. BAAC was created in 1966 with a specific mandate to serve agriculture. BRI-UD was reorganized in 1983/84 following the collapse of BIMAS to serve rural low- and middle- income households and loans for trading and other nonfarm activities have dominated its portfolio. Grameen started as an NGO program in 1976 to serve the poor and became a specialized bank for the poor in 1983. Almost 90 percent of its current clients are women borrowing for farm-related and nonfarm activities.

All three institutions lend to millions of clients, but BAAC is relatively more successful as it reaches over 75 percent of the country's farm families. It has a larger loan portfolio and larger average loan size. It performs well in reaching the poor as seen by the comparison of average loan size with the country's GDP per capita. GB largely makes group loans, BRI-UD makes only individual loans, and BAAC uses both types of technology.

Savings mobilization is one performance criterion that sharply differentiates the three. The total savings for BAAC and BRI-UD are roughly equal, but the number of savers is much larger in BRI-UD. The total savings in BRI-UD far exceed its loan balances, while BAAC and GB rely on other sources of funds for a significant share of their total lending. Grameen does not actively promote voluntary savings. Sustainability is the second major difference among the three. BAAC employs a low interest rate policy so its interest rate spread is the smallest and, although highly efficient (3.5 percent operating costs), its profits and return on assets are low. It has some loan arrears, especially for loans made to cooperatives and farmer associations. It would have to raise the average yield on loans from 11 to almost 15 percent to become free of subsidies. The GB has an even more serious problem because it would have to raise its nominal

interest rate on general loans from 20 to 33 percent to be subsidy free. BRI-UD charges the highest interest rates and earns the highest rate spread so it can easily cover its higher operating costs. It was so profitable in 1995 that it could have reduced its yield on loan portfolio from 31.6 to 16.3 percent and remained free of subsidy. Other things being equal, BAAC would need to charge roughly 15 percent on loans, BRI-UD almost 16 percent, and GB about 33 percent.<sup>3</sup> Considering their differences in loan sizes, BAAC should reach self-sufficiency with lower interest rates, while the GB would need to charge the highest rates.

## **V. Factors that Determine the Success of Financial Institutions**

Why have these flagship institutions succeeded relatively well when so many Asian institutions perform poorly? Why has BRI-UD performed so much better than other rural financial institutions in Indonesia, and why has Grameen done so much better than other banks in rural Bangladesh? Each case is unique; however, research reveals systematic factors that influence the success of financial institutions. They are summarized here under a three-pronged analytical framework of policy environment, financial infrastructure, and institutional development.

### **A. Policy Environment**

Although the urban bias of many economic policies in some Asian countries has been reduced, many policy issues that influence the prospects for developing sound rural financial markets must be addressed in Asian countries.

1. Interest Rates. The first problem is that interest rates for farm loans are controlled in some countries and, in others, financial institutions are reluctant to raise rates in spite of deregulation. Rates must be high enough so financial institutions can earn interest spreads that

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<sup>3</sup> These values vary from year to year depending on the amount of subsidies received. It would be necessary to evaluate carefully loan loss provisions, profits needed for future investment and growth, and several other factors before determining optimum interest rates.

will cover operating costs and losses. They must be positive in real terms to stimulate savers to deposit funds for lending, and owners must earn enough profits for a reasonable return on capital, for reserves and for reinvestment for future growth. Therefore, institutions must be free to price their loans and other services to cover costs and risks. Countries, such as India and Bangladesh, with well-intended controls on interest rates for certain sectors or groups of clients undermine sustainability. The low interest-rate policies of BAAC and GB are intended to assist borrowers, but they force the institutions to rely on governments and donors for continuous subsidies, which introduce uncertainties and the possibility of political intervention. BRI-UD determines its rate structure so it can avoid some of these problems.

The second problem is that market-oriented institutions must compete with subsidized institutions. This is becoming a serious problem in Indonesia because subsidized credit is being pumped into village projects to alleviate the effects of the financial crisis. BRI-UD may not be seriously affected but other rural financial institutions are hurt. The soft conditions and weak enforcement procedures associated with these special projects may undermine the repayment culture as loans are treated as grants. Emergency assistance must be channeled through networks other than financial institutions.

2. Client Selection. Freedom to set interest rates is often linked to freedom in client selection. Subsidized credit projects usually carry restrictions about the target group. The more narrowly specified the target group (e.g. small rice farmers), the greater is the risk that the lender will be forced into a risky, undiversified portfolio. Moreover, the greater the subsidy, the greater the potential for political intrusion over credit allocation, as demonstrated in the case of the Indian loan melas. The three flagship institutions select their own clients with the exception of the special government projects administered by BAAC and restrictions on the nonfarm enterprises it can serve. Financial institutions must be able to design and market financial services that match the demands of their potential clients. They must avoid targeted programs



that constrain them to serve a specific group or type of client because this will inhibit portfolio diversification as a protection against systemic risks. Clients should self-select themselves to use products offered by specific institutions rather than being targeted by a specific program.

Freedom of choice by client and institution permits developing a banking relationship whereby the clients realize that financial services are offered because they are perceived as valued clients.

The three institutions market specific products to interested clients. For example, Grameen shifted its membership towards women who are better suited than men for group lending and weekly meetings. Some MFOs avoid losses by requiring clients to operate a business for several months before seeking a loan.

## **B. Financial Infrastructure**

One of the most overlooked aspects of rural financial market success is the financial infrastructure needed to support financial intermediation. Infrastructure is important because it affects the costs of all financial institutions.

1. Legal and Regulatory Framework. The three flagship financial institutions have advantages compared to nonregulated competitors because they operate under charters that permit them to legally mobilize deposits. MFO regulations must be different from commercial banks because of the absence of physical collateral for loans. The regulatory capacity in the three countries has been questioned but the safety and soundness of these institutions has thus far been assured. The Asian financial and economic crisis revealed that an improved regulatory framework is required for developing stronger financial institutions (Kochkar, Loungani, and Stone, 1998).

An important lesson from Bangladesh is the possibility that MFOs can temporarily avoid some problems affecting commercial banks, such as complicated legal procedures to collect loans. When clients are motivated to repay by peer pressure and access to new loans, the legal framework may be less important, but problems may develop for larger loans when more

traditional forms of contract enforcement are required. The more MFOs act like traditional banks, the more they can expect to face similar problems.

2. Information Systems. No systematic analysis has been done about information systems in these three countries. Grameen's centralized accounting system prevented problems encountered by other MFOs whose records were swept away in the 1998 flood. Land titling projects in Thailand reduce transaction costs for lenders by improving access to information about the legal status of land offered as collateral. Efficient systems to supply information about the indebtedness and repayment history of borrowers are required, as financial markets become more sophisticated. Lenders need ready access to accurate and current information to determine if loan applicants have outstanding loans elsewhere. Regulated institutions usually must provide names of delinquent borrowers so all institutions know a borrower's debt status, but this information is usually not available from nonregulated institutions. Large countries without national identity cards, such as India, have a special problem in verifying the client identity.

### **C. Institutional Development**

The three flagship institutions have benefited because their countries, excepting Bangladesh, have a reasonably good policy environment and financial infrastructure. Moreover, their success evolved out of a long and careful process of institutional development involving the complex interaction between the design of the institution, its management and governance, incentive systems, human capital development, and a variety of other factors (Chaves and Gonzalez-Vega, 1996; Yaron, et al., 1997).

1. The Design of Products and Services. Financial institutions must design specific products and services considering two objectives. The first is expected client demand considering competing formal and informal sources. The second is the ability to cover costs and generate profits, either through single transactions or multiple transactions over the life of the client relationship. Financial institutions may not effectively compete with the informal sector in

offering very small, emergency loans, but BAAC and GB have successfully designed products and technologies for short-term working capital loans without formal collateral.

These three institutions have used market research, test marketing, and pilot projects to test and adapt their products to fit client demands. The case studies describe how BRI-UD and BAAC developed attractive savings products. Moreover, unlike most targeted credit projects, these institutions lend for multiple purposes recognizing that clients usually know best how to use their loans, but expect full repayment regardless of how loan proceeds are used.

2. Loan Recovery. Loan recovery often makes the difference between success and failure of financial institutions. These three institutions report arrears rates of less than ten percent and loan losses are much lower. Several factors influence repayment rates. First, successful institutions design products that enhance borrower's ability to repay, for example, by making small loans and adjusting repayment schedules to borrower cash flow. The weekly repayment schedule used by the GB makes each payment small and provides frequent contact with clients. Client drop out may be a sign that products and technologies need to be changed. For example, Grameen and some MFOs in Bangladesh have recently experienced high dropout rates. One explanation is that their loan products, repayment schedules, and savings requirements are excessively rigid and need to be better adapted to client needs (Wright, 1999).

Second, institutions increase borrower willingness to repay in two ways. Peer pressure among group members may encourage repayment of joint-liability loans. An even more important factor is the positive image of institutions seeking long-term relationships with clients, so the expectation of future loans with superior terms and conditions induces good repayment. In addition, BRI-UD uses the incentive of interest relates to stimulate on-time payments, while BAAC imposes late payment penalties.

Timely information about clients is a third factor affecting repayment. All three institutions have good internal information systems so loan officers know immediately when

loans become overdue, and can follow up with clients and arrange for repayment. The open weekly Grameen meetings where loan payments and savings deposits are made provide a transparent way for clients to know who is not paying and places great social pressure on delinquent borrowers.

3. Management and Governance. Managing large institutions with thousands of staff and hundreds of outlets is a huge task in countries with poor communication infrastructure. These three institutions have the reputation of being professionally managed and enjoy considerable autonomy in day-to-day operations. The founders of BRI-UD and GB are well known for their vision and commitment, and they have instilled these traits in their subordinates. The Thai government has consistently chosen good managers for BAAC because good management and efficiency rather than political expediency were demanded by the governance system. At times, foreign advisors may have protected BRI-UD from political pressures and poor decisions.

4. Staff Incentive Systems. Performance-based incentive systems for management and staff are used by most successful institutions. The BRI-UD system was designed as profit and loss centers, which facilitates paying performance-based remuneration. Both BRI-UD and BAAC use bonus payments to stimulate high levels of staff efficiency. Bonuses are paid either on overall institutional performance or the efficiency of the individual employees. Employees desire to retain their employment because salaries are higher than some equivalent jobs in the public or private sector. Incentives encourage loan officers to serve many clients and manage a large portfolio. GB operates under more difficult constraints because of the personnel policies of the bureaucratic state-owned banks, so group spirit and social commitment are used to achieve good staff performance. In the recent flood, Grameen first aided its employees so they could later effectively service their clients, and it offered special compensation and vacation time for employees working under difficult circumstances.

5. Human Capital Development. These three institutions use different recruitment and hiring policies to obtain high quality employees. BAAC and GB have higher educational requirements for potential loan officers, while BRI-UD hires staff with lower education levels but who know the market in which they are assigned. All three use intensive training programs to teach specific skills and instill the institutional mission. BAAC has an ADB technical assistance project to upgrade its operations and staff training since the recent authorization to expand lending to new clients in nonfarm enterprises and increasing loan sizes for existing farm clients requires more expertise. New staff in BRI-UD and BAAC are assigned as trainees or apprentices before being hired as regular staff. Loan officers in BRI-UD earn higher loan approval authority as they gain experience, and the decentralization of decisionmaking is possible because of investments in human capital development.

## **VI. Conclusions and Implications**

The rural financial markets in most of Asia are poorly prepared to enter the next century. Many institutions are weak and survive only because of government and donor funding. They lack technical competence to evaluate credit risks, the financial infrastructure is not supportive, and governmental policies are often more destructive than supportive. New information and communication technologies are revolutionizing financial markets, but most Asian rural financial institutions are far removed from these innovations. Financial dualism is increasing, first, in the gap between rural and urban firms and households and their access to financial services. A second dimension of financial dualism is arising in the “digital divide” that separates those using modern computers and communication technologies from those that do not.

While Asian policymakers have employed the directed credit approach to developing rural financial markets during the last three decades, a new paradigm has emerged employing a more market-oriented approach (Adams, 1998; Egaitzu, 1988). The relative success of many microfinance programs can be attributed to employing this new paradigm. By clinging to the old

paradigm, rural financial markets in most of Asia have not duplicated the successes of Japan, Taiwan and South Korea in serving rural areas. Government interference has been particularly heavy in South Asia and China, so it is not surprising that financial institutions have performed badly in these countries. Where markets have been allowed to operate more freely, as in Thailand and Indonesia, performance has been better.

The three-pronged analytical framework of policy environment, financial infrastructure, and institutional development used in Section V helps pinpoint where important challenges lie in Asia. The specific problems vary but improvements are needed in most countries in all three areas. For too long, many countries have supported failing institutions, especially agricultural development banks, which consume scarce resources and represent unfair competition to other institutions attempting to expand outreach in a sustainable manner. These institutions must either be closed or effectively rehabilitated if countries are to successfully reform rural finance. Donors must deny support to countries that fail to take meaningful steps towards reforms.

Asian countries with weak financial markets will suffer in the worldwide competition for markets compared to other developing countries with better rural financial systems. The opportunities for rapid improvement, however, exist in Asia. The region has a few flagship financial institutions that are already well advanced and can serve as models for other institutions. Moreover, several countries have highly trained personnel who could create new financial technologies and manage institutions if they were given the opportunity, flexibility, and financial support. It is up to the governments in the region to give them this opportunity. The roles of government are to create a favorable environment, invest in supportive infrastructure, and build institutions. The governments also need to recognize the role that the private sector can play in financial markets, and to avoid negative policies that undermine institutional viability, such as trying to solve social problems by channeling subsidized loans through financial institutions. Asia has the potential to build strong market-oriented rural financial systems. However, several

countries lack the vision and the will to make the necessary changes. The status quo benefits the rural elite but it prejudices the poor.

Admittedly, there are serious challenges in serving the rural clientele in countries with a large rural poor, limited resources, and subject to catastrophes of conflicts and natural disasters. Serving agriculture involves high risks and costs, so expanding the formal financial frontier (Von Pischke, 1991) is not simply a matter of mimicking microfinance. However, simply following the old paradigm is not going to resolve these difficult problems either. Fortunately, the successful flagship institutions are instructive and show the possibilities for strong outreach and sustainability when appropriate policies and institutional designs are employed.

**Table.1: Selected Characteristics and Performance Measures of BAAC, BRI-UD, and the Grameen Bank**

Item	BAAC	BRI-UD	GB
Year established/reorganized	1966	1983/84	1983
Clientele	Farmers, cooperatives, farmers' associations	Rural low-and middle-income households	Rural poor
Financial services	Loans and savings deposits	Loans and savings deposits	Loans and compulsory savings
Lending technology	Group and individual	Individual	Group
Approximate number of loans outstanding	3.1 million	2.3 million	2.1 million
Volume of loans outstanding	\$3.8 billion (non-cooperative loans) <sup>a</sup>	\$1.2 billion	\$289 million
Average outstanding loan	\$1,285	\$567	\$142
Average outstanding loan as percentage of GDP per capita	42 <sup>b</sup>	54	64
Average annual volume of savings	\$2.8 billion	\$2.6 billion	\$133 million
Average annual savings as a percent of average annual outstanding loans	66.5	199.0	45.6
Number of savers	4.4 million <sup>c</sup>	14.5 million	2.1 million
Approximate nominal effective annual interest rate	8.3 to 15.5	32.7	20
Interest rate spread	1995: 4.1	1994: 21.7	1995: 8.0
Total operating costs as percent of annual average outstanding loans	1995: 3.5	1994: 13.5	1995: 10.6
Return on assets	1995: 0.55	1994: 4.8	1995: 0.14
Percentage of outstanding loans in arrears	8.3	6.5	3.6
Subsidy dependence index	1995: 35.4 <sup>b</sup>	1995: negative <sup>d</sup>	1996: positive <sup>e</sup>

Source: Adapted from Yaron, Benjamin, and Piprek (1997) except where noted.

a: BAAC reported total loans outstanding in 1996 of B177 billion (about \$6.9 billion).

b: Reported by Muraki, Webster, and Yaron (1998). According to their estimates, in 1995 BAAC would have had to increase its average yield on loan portfolio from 11.0 to 14.89 percent (i.e., 35.4 percent) to be free of subsidies.

c: Reported by Fitchett (1997).

d: Charitoneko, Patten, and Yaron (1998) reported that the BRI unit desas were so profitable in 1996 that they could have reduced their yield on loan portfolio from 31.6 to 16.3 percent and still have remained subsidy independent.

e: Reported by Morduch (1999). According to his calculations, the GB would have to increase its nominal interest rate on general loans from 20 to 33 percent to become free of subsidies.



## References

- Adams, Dale W, 1998. "The Decline in Debt Directing: An Unfinished Agenda." Paper presented at the Second Annual Seminar on New Development Finance, Goethe University of Frankfurt, 21-25 September.
- ADB (Asian Development Bank). 1969. Asian Agricultural Survey. Tokyo: University of Tokyo Press, and Seattle: University of Washington Press.
- ADB. 1978. Rural Asia: Challenge and Opportunity. New York: Praeger Publishers.
- Charitonenko, Stephanie, Richard H. Patten, and Jacob Yaron. 1998. "Indonesia, Bank Rakyat Indonesia – Unit Desa 1970-1996." Case Studies in Microfinance. Sustainable Banking with the Poor. Washington DC: World Bank. June.
- Chaves, Rodrigo A., and Claudio Gonzalez-Vega. 1996. 'The Design of Successful Rural Financial Intermediaries: Evidence from Indonesia. World Development 24(1): 65-78.
- Christen, Robert P., Elisabeth Rhyne, Robert C. Vogel, and Cressida McKean. 1995. "Maximizing the Outreach of Microenterprise Finance: An Analysis of Successful Microfinance Programs." Program and Operations Assessment Report No. 10. Washington DC: United States Agency for International Development.
- Egaitsu, Fumio. 1988. 'Rural Financial Markets: Two Schools of Thought.' In Farm Finance and Agricultural Development. Tokyo: Asian Productivity Organization. p. 111-122.
- Fitchett, Delbert. 1997. "Comparative Analysis of Savings Mobilization Strategies – Case Study of Bank for Agriculture and Agricultural Cooperatives (BAAC), Thailand." Eschborn: Deutsche Gesellschaft für Technische Zusammenarbeit.
- Hulme, David, and Paul Mosley. 1996. Finance against Poverty. Vol. 1. London: Routledge.
- Kochkar, Kalpana, Prakash Loungani, and Mark R. Stone. 1998. "The East Asian Crisis: Macroeconomic Developments and Policy Lessons." Working Paper No. 128. Washington DC: International Monetary Fund.
- Meyer, Richard L., and Geetha Nagarajan. 1999. Rural Financial Markets in Asia: Paradigms, Policies, and Performance, Hongkong, Oxford University Press.
- Morduch, Jonathan. 1999. "The Role of Subsidies in Microfinance: Evidence from the Grameen Bank.," Journal of Development Economics, Vol. 60, pp. 229-248.
- Muraki, Tetsutaro, Leila Webster, and Jacob Yaron. 1998. "Thailand, BAAC – The Thai Bank for Agriculture and Agricultural Cooperatives: Case Studies in Microfinance. Sustainable Banking with the Poor. Washington DC: World Bank. April.
- Von Pischke, J.D. 1991. Finance at the Frontier. Economic Development Institute. Washington DC: World Bank.

- Wright, Graham A.N. 1999. "Microfinance Systems: Straight-Jackets or Tailored Suits, Designing Quality Financial Services for the Poor." Dhaka: University Press Limited and London: Zed Books. (In press)
- Yaron, Jacob. 1992. "Successful Rural Finance Institutions." Discussion Paper No. 150. Washington DC: World Bank.
- , McDonald P. Benjamin, Jr., and Gerda L. Piprek. 1997. "Rural Finance: Issues, Design, and Best Practices." Environmentally and Socially Sustainable Development Studies and Monographs Series 14. Washington DC: World Bank.